

C L A I M S

What is claimed is:

- 1 1. A device for extracting manure from bedding material, comprising:
 - 2 a. a detachable scoop head having a plurality of apertures joined
3 together to define a space, the apertures sized to pass the bedding material
4 there through but not the manure;
 - 5 b. a detachable motor assembly coupled to the scoop head via a connector for
6 vibrating the device to promote the bedding material to fall through the
7 apertures; and
 - 8 c. a detachable handle coupled to the motor assembly via a coupling, wherein the
9 handle includes a power pack for supplying electrical power to the motor
10 assembly and for forming a counterweight to the scoop head when the
11 device is lifted.
- 1 2. The device of claim 1, wherein the apertures are formed between elongated elements.
- 1 3. The device of claim 1, wherein the power pack is housed within the detachable handle.
- 1 4. The device of claim 1, wherein the power pack includes one or more batteries.

1 5. The device of claim 1, further including a switch disposed on the handle for connecting
2 power from the power pack to the motor assembly via a plurality of wires.

1 6. The device of claim 5, wherein the motor assembly has a positive end and a negative end,
2 the wires providing positive power from the power pack to the positive end of the motor
3 assembly and negative power from the power pack to the negative end of the motor assembly.

1 7. The device of claim 1, wherein the motor assembly is a DC motor.

1 8. The device of claim 1, wherein the motor assembly is housed in a motor housing.

1 9. The device of claim 1, further including a stand having a release mechanism coupled to
2 the device, wherein the release mechanism releases the stand in a fully deployed position to
3 facilitate raising the scoop head.

1 10. The device of claim 9, wherein a first end of the stand extends downward to a ground
2 level at an approximately thirty degree angle from the device in the fully deployed position and a
3 second end of the stand is secured to the device.

1 11. The device of claim 9, wherein the stand includes a substantially middle section coupled
2 to the device and two L-shaped arms that extend outward on either side of the device in the fully

3 deployed position, wherein the device extends substantially perpendicular over the stand.

1 12. The device of claim 2, wherein the scoop head includes a sloped bottom wall, two side
2 walls, and a back wall, the side walls being coupled to the back wall at adjoining edges, a
3 section of the sloped bottom wall and a section of the side walls being coupled to a
4 section of the elongated elements, and wherein each of the walls has a plurality of
5 generally parallel slots spaced apart from each other a distance to pass the bedding
6 material between the parallel slots but not the manure.

1 13. The device of claim 12, wherein the side walls and the back wall are generally
2 perpendicular to the bottom wall.

1 14. The device of claim 12, wherein the elongated elements are angled between twenty and
2 ninety degrees from the sloped bottom wall and point outward.

1 15. The device of claim 12, wherein the connector is mounted on a middle section of the
2 sloped bottom wall.

1 16. The device of claim 1, wherein the scoop head is injected molded plastic.

1 17. The device of claim 1, wherein the scoop head is formed of elongated metal stock pot

welded into position.

18. The device of claim 1, wherein the scoop head is formed of expanded metal sheet with sufficiently sized openings to pass the bedding material but not the manure.

19. The device of claim 18, wherein the expanded metal sheet is folded to form a scoop.

20. A method of making a device to extract manure from bedding material, comprising the steps:

- a. providing a detachable scoop head having a plurality of apertures
joined together to define a space, the apertures sized to pass the bedding material there through but not the manure;
- b. providing a detachable motor assembly coupled to the scoop head via a connector
for vibrating the device to promote the bedding material to fall through the apertures; and
- c. providing a detachable handle coupled to the motor assembly via a coupling,
wherein the handle includes a power pack for supplying electrical power to the motor assembly and for forming a counterweight to the scoop head
when the device is lifted.

21. The method of claim 20, wherein the apertures are formed between elongated elements.

- 1 22. The method of claim 20, wherein the power pack is housed within the detachable handle.
- 1 23. The method of claim 20, wherein the power pack includes one or more batteries.
- 1 24. The method of claim 20, further including a switch disposed on the handle for connecting
2 power from the power pack to the motor assembly via a plurality of wires.
- 1 25. The method of claim 24, wherein the motor assembly has a positive end and a negative
2 end, the wires providing positive power from the power pack to the positive end of the motor
3 assembly and negative power from the power pack to the negative end of the motor assembly.
- 1 26. The method of claim 20, wherein the motor assembly is a DC motor.
- 1 27. The method of claim 20, wherein the motor assembly is housed in a motor housing.
- 1 28. The method of claim 20, further comprising the step of providing a stand having a release
2 mechanism coupled to the device, wherein the release mechanism releases the stand in a fully
3 deployed position to facilitate raising the scoop head.
- 1 29. The method of claim 28, wherein a first end of the stand extends downward to a ground
2 level at an approximately thirty degree angle from the device in the fully deployed position and a

3 second end of the stand is secured to the device.

1 30. The method of claim 28, wherein the stand includes a substantially middle section
2 coupled to the device and two L-shaped arms that extend outward on either side of the device in
3 the fully deployed position, wherein the device extends substantially perpendicular over the
4 stand.

1 31. The method of claim 21, wherein the scoop head includes a sloped bottom wall, two side
2 walls, and a back wall, the side walls being coupled to the back wall at adjoining edges, a section
3 of the sloped bottom wall and a section of the side walls being coupled to a section of the
4 elongated elements, and wherein each of the walls has a plurality of generally parallel slots
5 spaced apart from each other a distance to pass the bedding material between the parallel slots
6 but not the manure.

1 32. The method of claim 31, wherein the side walls and the back wall are generally
2 perpendicular to the sloped bottom wall.

1 33. The method of claim 31, wherein the elongated elements are angled between twenty and
2 ninety degrees from the sloped bottom wall and point outward.

1 34. The method of claim 31, wherein the connector is mounted on a middle section of the

2 sloped bottom wall.

1 35. The device of claim 20, wherein the scoop head is injected molded plastic.

1 36. The device of claim 20, wherein the scoop head is formed of elongated metal stock pot
2 welded into position.

1 37. The device of claim 20, wherein the scoop head is formed of expanded metal sheet with
2 sufficiently sized openings to pass the bedding material but not the manure.

1 38. The device of claim 37, wherein the expanded metal sheet is folded to form a scoop.